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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,501	10/01/2003	Yasuhiro Suzuki	2018-783	4230

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EXAMINER

COTTINGHAM, JOHN R

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/674,501	<b>Applicant(s)</b> SUZUKI, YASUHIRO	
	<b>Examiner</b> John R. Cottingham	<b>Art Unit</b> 3679	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 9 10 13 is/are allowed.
- 6) ☒ Claim(s) 3-8, 11, 12 and 14-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 3-8, 11-12, and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 62-147709 (Hereinafter referred to as Japanese patent '709). Japanese Patent '709 shows all of the claimed subject matter of a screw fastening structure in the translation and Figures 1-4.

Regarding claim 3, a screw fastening structure comprising: a screw 16 having a male-threaded portion and a screw head, which is positioned at an end of the screw in opposition to an engaging side of the screw; and a housing 13 including a resinous portion to be threadably engaged with the male-threaded portion, wherein: the resinous portion 13 has a round through hole for guiding the male-threaded portion to be engaged therewith; the resinous portion 13 has a an inlet 15 of and concentrically clearance inlet hole around with the through hole; and an inner diameter of the clearance inlet hole is larger than an outer diameter of the male-threaded portion.

Regarding claim 4, wherein the clearance inlet hole 15 has a tapering shape (intersection of 15 and 13), where the inner diameter of the clearance inlet hole becomes smaller in a screwing direction of the screw.

Regarding claim 5, a screw fastening structure comprising: a screw 16 having a male-threaded portion and a screw head, which is positioned at an end of the screw 16 in opposition to an engaging side of the screw; and a housing 11 including a resinous portion 13 having a through hole 17 to be threadably engaged with the male-threaded portion, wherein the length of the male-threaded portion is shorter than the length of the through hole so that the male-threaded portion should not be projected from the outlet of the through hole when engaged therewith.

Regarding claim 6, a screw fastening structure comprising: a screw 16 having a male-threaded portion; and a housing 11 including a resinous portion 16 to be threadably engaged with the male-threaded portion, wherein the resinous portion 13 has a round through hole for guiding the male-threaded portion to be engaged therewith, and the resinous portion 13 has a clearance portion around an outlet 15 of and concentrically with the through hole.

Regarding claim 7, wherein the clearance portion is a clearance outlet hole 15, the inner diameter of which is larger than the outer diameter of the male-threaded portion.

Regarding claim 8, wherein the clearance portion 15 is formed by a chamfered outlet portion. (Between 15 and 13)

Regarding claim 11, a screw fastening structure comprising: a screw 16 having a male-threaded portion; a housing including a resinous portion to be threadably and the resinous portion, wherein the male-threaded portion has a non-circular shape in its cross-section (it has a oblong triangular shape because the threads are not straight

Art Unit: 3679

across when viewed in the horizontal cross section), that is perpendicular to an axial, screw advancing direction of the male-threaded portion.

Regarding claim 12, wherein the non-circular shape is a substantially triangle shape.

Regarding claim 14, the resinous portion has a round through hole for guiding the male-threaded portion to be engaged therewith; the adhesive is applied in its non-hardened state (inherent with any glue or adhesive) to the inner surface of the through hole before the male-threaded portion 14 is threadably engaged with the inner surface of the through hole; and the adhesive is hardened after the male-threaded portion is threadably engaged with the through hole. The applicant is reminded that this is a product by process claim, and the process is not given patentable weight if the product can be shown by the prior art, and in this case it does.

Regarding claim 15, the screw has a non-threaded portion (the tip of the screw), which is positioned at an end of the screw in opposition to the side of the screw head, the non-threaded portion has non male threads (any surface without threads meets this limitation such as the tip in this case), and the non-threaded portion projects from the outlet of the through hole (bottom hole in 11).

Regarding claim 16, the male-threaded portion has a length that is longer than a length of the through hole in an axial, screw advancing direction. (the threaded portion of the screw 16 is shown to have a portion longer than the threaded portion of the hole).

Regarding claim 17, wherein the male-threaded portion has a non-circular shape in the plan view, taken particular to the axial direction. (when viewing the screw in the

Art Unit: 3679

plan view, only a portion of the thread will be visible and giving the screw and non-circular shape).

### ***Response to Arguments***

3. Applicant's arguments filed 6/22/04 have been fully considered but they are not persuasive. The applicant first is arguing more than what is being claimed. Applicant argues that the through hole of JP' '709 is not a through hole as in the claimed invention. The Examiner disagrees with this view, the term "through hole" does not limit the phrase to all hole that are open at both ends as the Applicant is trying to argue, a through hole can also be a hole in a side of a plate as in the Japanese reference. The applicant also argues that the male threaded portion is shorter than the length of the through hole. This is shown in JP '709, the male threaded portion ends before the ends of the either end of the hole and thus meeting the claimed limitation.

Applicant further argues that a transverse cross section of the screw 16 in JP '709 is not shown so that in effect makes it circular in the cross section. The prior art does not have to show every view, some views are inherent to the design and one of ordinary skill in the art would know the shape in another view from the views shown. The cross section of a screw along its length at any point is not circular because the threads are at an angle and at any point, only a portion of the thread would be visible in the cross sectional view.

### ***Allowable Subject Matter***

4. Claims 2, 9-10 and 13 are allowed

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (703) 306-3439. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John R. Cottingham  
Primary Examiner  
Art Unit 3679

jrc